UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

AVAILABILITY OF PETROGRAPHIC THIN-SECTIONS

FROM THIRTY-FIVE WELLS FROM NATIONAL PETROLEUM RESERVE IN ALASKA

NORTH SLOPE, ALASKA

by

Arthur L. Bowsher, Irvin L. Tailleur, and H. A. Gibson

OPEN-FILE REPORT NO. 81-1307

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

Availability of petrographic thin-sections from thirty-five wells from National Petroleum Reserve in Alaska North Slope, Alaska

by

Arthur L. Bowsher, Irvin L. Tailleur, and H. A. Gibson

Cores and cuttings from wells drilled in the National Petroleum Reserve in Alaska are available for non-destructive examination at the NPRA core storage "facility" in Anchorage, Alaska. Sets of thin-sections from cores from thirty-five wells in the National Petroleum Reserve in Alaska are available for study on request as indicated below. These sets are made as a matter of convenience in connection with a study of the density of cores from the wells. R. Morin and H. Gibson sampled the cores to obtain specific gravity determinations for characteristic rock types represented in the cores. Sampling was designed so that we could obtain thin-sections of the material from which specific gravity determinations were made. Attempt was made to include any and all reservoir rocks.

Thin-section sets for each well will be sent out on three-week loan in the order that written requests are received. The slides may be retained for study by the U.S. Geological Survey for up to three weeks between successive loans. There are no facilities for systematic on-site examination of the slides.

Requests for loan should be sent to:

I. L. Tailleur
Office of National Petroleum Reserve in Alaska
U.S. Geological Survey, MS 87
345 Middlefield Road
Menlo Park, California 94025

Stratigraphic names are used in the lists of slides only for convenience of identifying the strata from which the thin-section is made and do not imply that the term is formally accepted by the U.S. Geological Survey (Committee on Stratigraphic Nomenclature).

The thin-sections made available for study through this report are as follow:

Atigaru No. 1 (ATI (1)	Yingsh Formation	"argillite"
NE/4, sec. 19, T. 14 N., R. 2 E.	Kingak Formation	2,272 ft.
• • • • • • • • • • • • • • • • • • • •	1,740 ft.	2,273 ft.
Ivishak Formation	2,030 ft.	2,285 ft.
8,713 ft.	2,100 ft.	.,
8,725 ft.	2,170 ft.	
-,	2,200 ft.	T.D. 2,285 ft.
"argillite"		
11,523.5°ft.	2,268.5 ft.	South Barrow No. 13 (S. BAR #13)
,	2,300 ft.	
	2,320 ft.	SW/4, sec. 14, T. 22 N., R. 18 W.
T.D. 11,535 ft.		"pebble shale unit"
	"Barrow Sand"	2,163 ft.
	2,363 ft.	2,173 ft.
Avuna No. 1 (AWU #1)	2,410 ft.	-
SE/4, sec. 30, T. 3 S., R. 25 W.	2,468 ft.	2,184 ft.
	1,00	2,188 ft.
Torok Formation	 Sag River Formation 	2,208 ft.
2,452 ft.	2,590 ft.	
3,666.5 ft.		Kingak Formation
3,667.5 ft.	2,610 ft.	2,291 ft.
-	Shublik Formation	2,303 ft.
3,676 ft.	2,639 ft.	2,312 ft.
6,014 ft.		2,323 ft.
6,021 ft.	2,738 ft.	-,313 26.
6,028 ft.	2,779 ft.	"Barrow Sand"
0,010 16.	**************************************	2,331 ft.
	"argillite"	
T.D. 11,200 ft.	2,879 ft.	2,341 ft. 2,412 ft.
		2,422 ft.
	T.D. 2,900 ft.	
South Barrow No. 1 (S. BAR #1)		"argillite"
cen N/2, sec. 28, T. 23 N., R. 18 W.		2,525 ft.
	South Barrow No. 6 (S. BAR #6)	
"pebble shale unit"	cen N/2, sec. 14, T. 22 N., R. 18 W.	T.D. 2,490 ft.
3,042 ft.	CC. 17, 32C. 14, 1. 12 11., 1. 10 11.	, ,,, ,
3,069 ft.	"Barrow Sand"	South Barrow No. 16 (S. BAR #16)
	2,346 ft.	
3,083 ft.	2,360 ft.	SE/4, sec. 1, T. 22 N., R. 18 W.
3,105.2 ft.	2,300 IC.	"argillite"
3,106.5 ft.		2,395 - 2,398 ft.
.3,115 ft.	T.D. 2,363 ft.	2,335 - 2,330 10.
3,152 ft.		
3,153.3 ft.		T.D. 2,399 ft.
	South Barrow No. 9 (S. BAR #9)	
3,158.5 ft.	SE/4, sec. 11, T. 22 N., R. 18 W.	South Bower, No. 12 (C. 222 412)
3,181.5 ft.		South Barrow No. 17 (S. BAR #17)
3,193 ft.	"pebble shale unit"	NW/4, sec. 30, T. 22 N., R. 16 W.
3,196 ft.	2,017 ft.	Vissel Branchise
3,196.4 ft.	2,042 ft.	Kingak Formation
	2,061 ft.	2,020 ft.
3,227.3 ft.		80 minus Co = 48
3,238 ft.	2,098 ft.	"Barrow Sand"
3,330 ft.	2,365 ft.	2,096 ft.
- 1001. 5	2,372 ft.	2,099 ft.
"argillite"		2,103 ft.
3,553 ft.	Kingak Formation	2,118 ft.
	2,384 ft.	
T.D. 3,553 ft.	2,401 ft.	2,126 ft.
2.0. 0,000 10.	2,404 ft.	2,128 ft.
	2,413 ft.	2,130 ft.
South Barrow No. 2 (S. BAR #2)		2,136 ft.
NW/4, sec. 14, T. 22 N., R. 18 W.	2,434 ft.	2,142 ft.
, , , , , , , , , , , , , , , , , ,		2,149 ft.
"pebble shale unit"	T.D. 2,450 ft.	2,245 10.
1,955 ft.		Sag River Formation
2,020 ft.		2,323 ft.
2,060 ft.	South Barrow #12 (S. BAR #12)	2,325 ft.
•	sw/4, sec. 23, T. 22 N., R. 17 W.	
2,111 ft.	"upper Barrow sand"	2,328 ft.
2,254 ft. 2,267 ft	1,966 ft.	2,334 ft.
2,287 ft.	1,981 ft.	2,335 ft.
Kingak Formation		2,337 ft.
2,332 ft.	1,988 ft.	2,338 ft.
	2,000 ft.	
"Barrow Sand"	2,003.5 ft.	2,343 ft.
2,356 ft.	2,021 ft.	2,344 ft.
	2,037 ft.	•
Shublik Formation	2,056 ft.	"argillite"
2,440 ft.		2,345 ft.
	Kingak Formation	-,
T.D. 2,505 ft.	2,072 ft.	m n n n n n n n
1.0. 1,303 10.	2,081.5 ft.	T.D. 2,382 ft.
South Barrow No. 3 (S. BAR #3)	2,093 ft.	South Barrow No. 18 (S. BAR #18)
	2,168.5 ft.	
S 1/4, sec. 13, T. 21 N., R. 18 W.	2,180 ft.	SW/4, sec. 24, T. 22 N., R. 17 W.
Torok Formation	W1 D	Torok Formation
201 ft.	"lower Barrow sand"	Torok Formation
	2,196 ft.	1,360.2 ft.
403 ft.	2,202.5 ft.	"nobble chale
993 ft.	2,209 ft.	"pebble shale unit"
Markle shels	2,213.5 ft.	1,704 ft.
"pebble shale unit"	-,413.J il.	1,713 ft.
1,406 ft.	Sag River Formation	1,733 ft.
:1,613 ft.	2,234 ft.	1,754.5 ft.
1,625 ft.	2,246 ft.	
-,	2,260 ft.	1,760.5 ft.
	-,	m n n 195 &.

T.D. 2,125 ft.

South Barrow No. 19 (S. BAR #19)	Shublik Formation	
SE/4, sec. 23, T. 22 N., R. 17 W.	7,903 ft.	Torok Formation
Torok Formation	7,352.2 ft.	3,787 ft.
1,331 ft.	7,362 ft.	3,799.5 ft.
1,336 ft.	7,374 ft.	3,810 ft.
1,346 ft.	7,376 ft.	5,690.5 ft.
"pebble shale unit"	7,545.5 ft.	5,697 ft.
1,352.5 ft.	7,563 ft.	7,136 ft.
1,354.3 ft.	Ivishak Formation	7,138 ft.
	7,572 ft.	7,141.5 ft.
"Barrow Sand"	7,573 ft.	"pebble shale unit"
2,044 ft.	7,574.2 ft. 7,575.2 ft.	7,369 ft.
2,047 ft.	7,575.2 tt. 7,627.4 ft.	7,374.5 ft.
Triassic		
2,054.3 ft.	Echooka Wormation	Kingak Formation
2,064.5 ft.	7,803 ft.	7,495 ft.
	Endicott Group	7,501 ft.
Sag River Formation	7,813 ft.	Chubish Domestica
2,209 ft.		Shublik Formation
2,220 ft.	"argillite"	10,270.5 ft.
2,225 ft.	7,882 ft.	10,274.5 ft.
2,230 ft.	7,901 ft.	10,283.5 ft.
2,231 ft.	m n . 7 a.c. a.	10,289 ft.
2,235 ft.	T.D. 7,945 ft.	10,294.5 ft.
2,245 ft.		10,300 ft.
m n 2 200 ft	W.T. Foran No. 1 (W.T. P. #1)	Ivishak Sandstone
T.D. 2,300 ft.	NW/4, sec. 13, T. 17 N., R. 2 W.	10,619.5 ft.
	Shublik Formation	10,621 ft.
West Dease No. 1 (WD #1)	7,545 ft.	10,629 ft.
NE/4, sec. 21, T. 21 N., R. 14 W.	7,545 IC. 7,547 ft.	10,633.5 ft.
Manualusk Croup	7,550 ft.	10,639.5 ft.
Nanushuk Group 605 ft.	7,550 ft.	10,647.5 ft.
626 ft.	7,552 ft.	10,815 ft.
1,099.5 ft.	7,556 ft.	10,820 ft.
1,055.5 ft.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10,823 ft.
1,916 ft.	Permian Limestone	10,824 ft.
•	8,254 ft.	10,828 ft.
"pebble shale unit"	8,258 ft.	10,830.5 ft.
2,959 ft.	8,262 ft.	10,833.5 ft.
2,974.6 ft.	8,266 ft.	10,838.5 ft.
Upper "Barrow Sand"	8,273 ft.	W111
3,701 ft.	8,283 ft.	Kavik Shale 11,108 ft.
3,715 ft.	M.D. O.DCA C.	11,118 ft.
3,721 ft.	T.D. 8,864 ft.	11,120 ft.
3,752 ft.		11,126 ft.
3,780 ft.	South Harrison Bay No. 1 (SHB #1)	11.135 ft.
3,786.2 ft.	NW/4, sec. 6, T. 12 N., R. 2 E.	Permian Limestone
3,794 ft.		11,719
	Permian Limestone	11;724 ft.
Lower "Barrow Sand"	10,613 ft.	12,749 ft.
3,817 ft.	10,619 ft.	12,753 ft.
3,823 ft. 3,912.5 ft.	10,621 ft.	12,971.5 ft.
3,921 ft.	10,625 ft.	20,372.0
	T.D. 11,290 ft.	Endicott Group
Sag River Formation	1.0. 11,290 ft.	14,976.5 ft.
3,960 ft.	Ikpikpuk No. 1 (IKPIK #1)	14,977.5 ft.
4,000.4 ft.	NE/4, sec. 25, T. 13 N., R. 10 W.	14,983 ft.
"argillite"	MLV 1, Sec. 13, 1. 13 R., R. 10 W.	14,985.5 ft.
4,151	Nanushuk Group	"argillite"
•	2,930 ft.	15,421 ft.
T.D. 4,170 ft.	2,936 ft.	15,465 ft.
	2,939 ft.	22/10/2 221
Drew Point (DPW)	2,947 ft.	T.D. 15,481 ft.
se/4, sec. 26, T. 18 N., R. 8 W.	2,950.5 ft.	
Torok Formation	2,960.5 ft.	
4,130 ft.		Inigok No. 1 (INIG #1)
4,136 ft.		NE/4, sec. 34, T. 8 N., R. 5
5,530 ft.		Nanushuk Group
5,903.5 ft.		2,637.7 ft.
5,908.2 ft.		2,649 ft.
"Barrow sand"		2,661 ft.
6,924.5 ft.		3,081 ft.
6,936.5 ft.		•
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Sag River Formation 6,979 ft. 6,994 ft. 7,005 ft.

Torok Formation 4,212 ft.	J. W. Dalton No. 1 (JWD #1) nw/4, sec. 14, T. 18 N., R. 5 W.	South Meade No. 1 (S. MD #1) NM/4, sec. 31, T. 15 N., R. 19 W.
5,006 ft.	Nanushuk Group	Torok Formation
5,007.5 ft.	3,503 ft.	3,010 ft.
7,059.8 ft.	3,514 ft.	4,950 ft.
7,064.3 ft. 8,216 ft.	3,529 ft.	4,958.6 ft.
8,220 ft.	Torok Formation	5,993 ft.
8,227.4 ft.	4,667.4 ft.	6,002.5 ft.
8,236.5 ft.	4,681 ft.	
8,236.6 ft.	4,689 ft.	Kingak Formation
8,851.8 ft.	4,690.5 ft.	7,503 ft.
•	4,694.5 ft.	8,492 ft.
Kingak Formation	5,609 ft.	8,498 ft.
9,342.1 ft.	6,585 ft.	8,501 ft.
9,345 ft.	·	8,507 ft. 8,513 ft.
9,448.7 ft.	"pebble shale unit"	. 6,313 16.
9,455.8 ft.	7,525 ft.	Sag River Formation
10,998 ft. 11,707 ft.	· Ivishak Formation	8,820.4 ft.
11,710 ft.	7,970 ft.	8,823 ft.
11,710 16.	7,973 ft.	8,823.5 ft.
Shublik Formation	7,990 ft.	8,835.2 ft.
12,273.5 ft.	7,993 ft.	8,840.2 ft.
12,276.5 ft.	7,996 ft.	8,847.1 ft.
12,500 ft.	7,996.5 ft.	8,851.2 ft.
12,529 ft.	7,997.5 ft.	8,852.1 ft.
12,711 ft.	8,072 ft.	8,859.6 ft.
12,730 ft.	8,073 ft.	8,864.7:ft.
Sadlerochit Group	8,074 ft. 8,134 ft.	Shublik Formation
13,485 ft.	8,137.5 ft.	
13,496 ft.	8,173.5 ft.	8,896.6 ft.
13,508 ft.	8,194 ft.	9,047.9 ft.
13,842 ft.	8,199 ft.	9,307.6 ft.
13,848 ft.		9,310 ft.
13,849.5 ft.	Permian Limestone	9,311 ft.
•	8,319 ft.	9,313.6 ft.
Permian Limestone	8,331 ft.	9,314.6 ft.
13,855.5 ft.	8,520 ft.	9,318.8 ft.
13,865 ft.	8,534.5 ft.	9,324.7 ft.
13,873 ft.	8,539.5 ft.	•
14,021.5 ft.	"argillite"	T.D. 9,945 ft.
14,037 ft.	9,359 ft.	
14,040.4 ft.		Oumalik No. 1 (OUM #1)
14,042 ft. 14,059.8 ft.	T.D. 9,367 ft.	SW/4, sec. 30, T. 6 N., R. 17 W.
14,065.6 ft.	,	Torok Formation
15,186.5 ft.	North Kalikpik No. 1 (KAL #1)	8,090.94 ft.
15,193 ft.	SW/4, sec. 3, T. 13 N., R. 2 W.	8,284 ft.
15,210 ft.	Torok Formation	8,492 ft.
	3,812 ft.	8,691 ft.
Lisburne Group	4,997 ft.	8,917 ft.
16,194.8 ft.	5,871 ft.	9,537 ft.
16,197.3 ft.	6,707 ft.	9,542 ft. 9,544 ft.
17,058.5 ft.	5,700 240	9,552 ft.
17,069.5 ft.	"pebble shale unit"	9,825 ft.
17,081 ft.	6,993.5 ft.	9,829 ft.
Kekiktuk Conglomerate	6,996.2 ft.	9,840 ft.
19,360 ft.	7,039 ft.	10,014 ft.
19,363.4 ft.	7,052.5 ft.	10,019 ft.
19,366.5 ft.	7,138 ft.	10,029 ft.
19,369 ft.	Yingah Powenties	10,233 ft.
20,092 ft.	Kingak Formation	10,253 ft.
	. 7,154.7 ft. 7,162.5 ft.	10,453.73 ft.
T.D. 20,102 ft.	7,162.5 IL. 7,164 ft.	10,669 - 10,682 ft.
•	7,166.5 ft.	"pebble shale unit"
North Inigok No. 1 (N. INIG #1)	7,168.5 ft.	10,992 - 11,007 ft.
SE/4, sec. 36, T. 11 N., R. 4 W.	7,206 ft.	11,852 - 11,872 ft.
31, 4, 366. 30, 1. 11 N., R. 4 W.	7,395 ft.	
Torok Formation	.,,,,,,	T.D. 11,872 ft.
6,852 ft.	T.D. 7,395 ft.	
6,855 ft.	•	Peard No. 1 (PEA #1)
6,864 ft.	Kugrua No. 1 (KUG #1)	NW/4, sec. 25, T. 16 N., R. 28 W.
"pebble shale unit"	NW/4, sec. 8, T. 14 N., R. 26 E.	
7,490 ft.	"nebble chale unit"	Nanushuk Group
7,499.5 ft.	"pebble shale unit"	3,042 ft.
7,501 ft.	7,202 ft.	3,044 ft.
•	Sadlerochit Group	4,289 ft.
Sag River Formation	10,480 ft.	Torok Formation
10,162 ft.	10,487 ft.	5,413.8 ft.
10,167 ft.	10,498 ft.	5,417 ft.
10,168.3 ft.	10 503 5 64	5,419 ft.
	10,503.5 ft.	-,
T.D. 10.170 f+	11,031 ft.	6,125.6 ft.
T.D. 10,170 ft.	11,031 ft.	
T.D. 10,170 ft.		
T.D. 10,170 ft.	11,031 ft.	6,125.6 ft.

Kingak Formation	Kingak Formation	
· 7,843.8 ft.	6,815 ft.	Square Lake No. 1 (SQ. L #1)
		cen E/2, sec. 2, T. 2 N., R. 6 W
. 7,848.5 ft.	6,817.6 ft.	
7,854.2 ft.	6,825 ft.	Prince Creek Formation
7,859.8 ft.	6,828 ft.	239 ft.
7,862.8 ft.	6,840.2 ft.	245 ft.
7,866.7 ft.	6,850 ft.	264 ft.
8,284.4 ft.	6,857.5 ft.	
0,000,000	0,037.3 10.	271 ft.
Sag River Formation	Sag River Formation	469 ft.
8,451 ft.	6,898 ft.	517 ft.
8,457.9 ft.		527 ft.
8,473 ft. "	6,898.5 ft.	532 ft.
Sadlerochit Group	6,902 ft.	
8,980 ft.	Ph. 1.171	570 ft.
•	Shublik Formation	577 ft.
8,993.7 ft.	7,426 ft.	588 ft.
9,001.5 ft.	7,436 ft.	608 ft.
9,498 ft.		612.5 ft.
9,500.5 ft.	Ivishak Formation	634 ft.
9,505.4 ft.	7,499 ft.	
3,303.4 24.	7,508 ft.	651 ft.
"argillite"		667 ft.
10,225	Endicott Formation	Seabee Formation
10,110		
	7,565.5 ft.	705 ft.
Seabee (SB)	7,501 ft.	706 ft.
SE/4, sec. 5, T. 1 S., R. 1 W.	7,588 ft.	943 ft.
52/4, Sec. J, I. I J., R. I H.	7,591 ft.	955 ft.
Torok Formation	•	
5,399 ft.	"argillite"	1,084 ft.
	7,729 ft.	1,655.5 ft.
10,072 ft.	7,907.5 ft.	1,664.5 ft.
10,073.8 ft.	1,907.5 ft.	1,702 ft.
10,088 ft.		1,713 ft.
10,091 ft.	T.D. 7,739 ft.	•
		1,731 ft.
10,095 ft.	East Simpson No. 2 (E SIMP #2)	1,745.5 ft.
10,096.3 ft.	SE/4, sec. 23, T. 19 N., R. 11 W.	1,818 ft.
12,012.8 ft.	22, 1, 010, 00, 00 20 11, 11	1,822 ft.
12,014.3 ft.	Panushuk Formation	1,841 ft.
12,037 ft.	2,380.5 ft.	1,041 10.
,	2,389 ft.	Nanushuk Group
Fortress Mountain Formation	•	1,940 ft.
	2,399.5 ft.	1,940.5 ft.
13,214 ft.	Torok Formation	
13,224 ft.		1,943 ft.
	6,059 ft.	2,063 ft.
"pebble shale unit"	6,065 ft.	7,849 ft.
14,591 ft.	6,073.5 ft.	3,027 ft.
		3,058 ft.
T.D. 15,611 ft.	"pebble shale unit"	3,103 ft.
	6,342 ft.	
	6,366 ft.	3,239 ft.
	•	3,259 ft.
Simpson No. 1 (SIMP #1)	Sag River Formation	3,279 ft.
SW/4, sec. 32, T. 19 N., R. 13 W.	6,705.5 ft.	
	6,726.5 ft.	T.D. 3,987 ft.
"pebble shale unit"		1.0. 3,307 10.
5,464 ft.	6,733 ft.	
•, • • • • • • • • • • • • • • • • • •	Sadlerochit Group	December 11 - 1 (000 41)
Kingak Formation	-	Topagoruk No. 1 (TOP #1)
5,677 ft.	7,167 ft.	NE/4, sec. 25, T. 15 N., R. 16 W.
5,684 ft.	7,174 ft.	Seach Semester
	7,174.5 ft.	Torok Formation
5,867.5 ft.	7,182 ft.	6,510 ft.
Sag River Formation	7,182.3 ft.	"mabble chale unie"
6,183 ft.	7,186.5 ft.	"pebble shale unit"
0,103 10.	7,100.3 16.	6,849 ft.
Shublik Formation	Endicott Group	6,859 ft.
6,304 ft.	7,190.5 ft.	Kingak Formation
6,316 ft.		
•	7,191.2 ft.	7,805 ft.
6,356 ft.	7,196 ft.	7,831.5 ft.
6,485 ft.	7,201.2 ft.	7,847 ft.
"argillite"	7,203 ft.	8,106 ft.
•	7,221.5 ft.	
6,557 ft.		Ivishak Formation
6,796 ft.	7,253 ft.	9,416 ft.
6,896 ft.	7,259 ft.	9,432 ft.
7,002 ft.	7,268 ft.	
.,	7,297 ft.	9,434.5 ft.
n n 2 000 f	7,310 ft.	9,435 ft.
T.D. 7,002 ft.		9,450 ft.
•	7,324.5 ft.	9,469.7 ft.
Park Cinner No. 1 (D. CTIM All)	7,331 ft.	9,490 ft.
East Simpson No. 1 (E SIMP #1)	7,346 ft.	9,425 ft.
NW/4, sec. 18, T. 18 N., R. 10 W.		9,440 ft.
Torok Formation	T.D. 7,505 ft.	9,445.2 ft.
	· · · · · · · · · · · · · · · · · · ·	9,507 ft.
2,679 ft.		9,510 ft.
5,123 ft.		9,516 ft.
5,129 ft.		9,517 ft.
		9,519 ft.
		9,521.5 ft.
		9,537 ft.
		9,538 ft.
		9,541 ft.
	r	9,555 ft.
	5 <u></u>	9,567 fr.
	- 1=	*

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Ravik Formation
                                                 Echooka Pormation
  9,585.5 ft.
                                                   16.931 ft.
  9,592.5 ft.
                                                   16,943 ft.
  9,597 ft.
                                                   16,949 ft.
Echooka Formation
                                                 T.D. 20,336 ft.
  9,816 ft.
"argillite" (M. Devonian)
                                                 Walakpa No. 1 (WAL #1)
  10,228
                                                 SE/4, Sec. 9, T. 20 N., R. 19 W.
T.D. 10,503 ft.
                                                 Torok Pormation
                                                   257 ft.
Tunalik (TUN)
                                                   273 ft.
SE/4, sec. 20, T. 10 N., R. 36 W.
                                                  Kingak Pormation
Nanushuk Formation
                                                    1,844 ft.
  3,284 ft.
                                                    1,864.5 ft.
  3,288.5 ft.
                                                    1,882 ft.
  3,296 ft.
                                                    1,983 ft.
  3,308 ft.
                                                   2,009 ft.
  3,825.3 ft.
                                                   2,020 ft.
  5,557.6 ft.
                                                    2.025.6 ft.
  5,559.5 ft.
                                                   2,061 ft.
  5,561 ft.
                                                   2,062.5 ft.
                                                   2,063.3 ft.
Torok Formation
                                                    2,064.8 ft.
  6,507 ft.
                                                   2,066 ft.
  6,510 ft.
  7,870 ft.
                                                   2,069 ft.
                                                   2,070 ft.
  7,877 ft.
                                                   2,071 ft.
  8,787.4 ft.
                                                   2,074 ft.
  8,795 ft.
                                                   2,077 ft.
  8,803 ft.
                                                   2,081 ft.
  8,808.5 ft.
                                                   2,084 ft.
  10,472 ft.
                                                   2,087 ft.
  10,490 ft.
                                                   2,090.5 ft.
  10,496 ft.
                                                   2,093 ft.
  10,502 ft.
                                                   2,096 ft.
"pebble shale unit"
                                                   2,099 ft.
  10,674 ft.
                                                   2,100 ft.
  10,680 ft.
                                                   2,102 ft.
  10,687.5 ft.
                                                   2,105 ft.
  10,701 ft.
                                                   2,108 ft.
  10,910 ft.
                                                   2,111 ft.
  10,922 ft.
                                                   2,810 ft.
  10,928 ft.
                                                   2,937 ft.
  10,934 ft.
                                                   2,961.5 ft.
  10,935 ft.
                                                   2,985 ft.
  10,936.5 ft.
                                                   2,992 ft.
  10,937 ft.
                                                   3,017.5 ft.
  10,940 ft.
  11,678 ft.
                                                  "Barrow Sand"
  11,684 ft.
                                                    3,060 ft.
  11,690 ft.
                                                    3,091 ft.
  11,693 ft.
                                                  Shublik Formation
  12,573 ft.
                                                    3,371.5 ft.
  12,574.2 ft.
                                                    3,394.5 ft.
  12,577 ft.
                                                    3,397 ft.
  12,582 ft.
                                                    3,405.4 ft.
  12,583 ft.
  12,585 ft.
                                                  "argillite"
  12,588 ft.
                                                    3,666 ft.
  12,591 ft.
                                                  T.D. 3,666 ft.
Ivishak Formation
  14,847 ft.
  14,855 ft.
 15,411 ft.
15,420 ft.
  15,421 ft.
  15,427 ft.
Kavik Shale
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16,237 ft. 16,240 ft. 16,255 ft. 16,260 ft.

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Walakpa No. 2 (WAL #2)
NE/4, sec. 31, T. 20 N., R. 19 W.
"pebble shale unit"
  2,611-ft.
  2,614 ft.
  2,617 ft.
  2,620 ft.
  2,623.5 ft.
  2,626 ft.
  2,629 ft.
  2,632 ft.
  2,635 ft.
  2,638 ft.
Kingak Formation
  2,639 ft.
T.D. 4,360 ft.
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The availability of other thin-sections from rocks and cores in the National Petroleum Reserve in Alaska is announced in the following reports.

- (a) Bowsher, A. L., and Tailleur, I. L., 1981, Availability of cores and cuttings and thin-sections from Ellesmerian strata of 16 test wells of National Petroleum Reserve in Alaska: U.S. Geological Survey, Open-File Report No. 81-
- (b) Bowsher, A. L., and Tailleur, J. L., 1981, Availability of petrographic thin-sections from the Fortress Mountain Formation, Central North Slope, Alaska: U.S. Geological Survey, Open-File No. 81-1094.
- (c) Tailleur, I. L., Gibson, H. A., and Morin, R. C., 1981, Availability of petrographic thin-sections from Lisburne Test Well No. 1 and comments by I. L. Tailleur on the relation of this well to strata exposed hereby in the Brooks Range: U.S. Geological Survey, Open-File Report No. 81-

Figure 1.- Location of wells for which thin-sections are available. O.F. 81-

